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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,825	12/08/2003	Takashi Kawai	1232-5222	4216
27123	7590	05/04/2005	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			TRIEU, VAN THANH	
			ART UNIT	PAPER NUMBER
			2636	

DATE MAILED: 05/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/730,825

Applicant(s)

KAWAI, TAKASHI

Examiner

Van T Trieu

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/29/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kurahashi et al** [US 6,278,480] in view of **Fraley** [US 5,793,419]

Regarding claim 1, the claimed compound eye optical unit, which has a plurality of optical elements each facing an object, and having an image-forming action (the compound eye camera 1 provided integrally with plural image pickup elements of CCD 20a, 20b and controlled by a CCD drive circuit 24, A/D conversion circuits 21a, 21b into a signal processing circuit 27, see Figs. 1 and 3, abstract, col. 4, lines 66-67, col. 5, lines 1-7 and col. 7, lines 28-41); and the image-pickup device (the compound eye camera 1 comprises the CCD 20a, 20b pickup optical system for photo-electrically converting an object image, see Fig. 3, col. 7, lines 28-41 and col. 8, lines 41-60); and the transmission unit (the synthesized panoramic image transmitted from the compound eye camera 1 is received by the personal computer through the digital interface 41, see Figs. 9 and 10, col. 14, lines 61-67 and col. 15, line 1); but **Kurahashi et al** fails to disclose the hold member, which holds the compound eye optical unit and the image pickup device and includes an attachment member for attachment to a user. However,

Kurahashi et al teaches that the compound eye camera 1 is integrally provided with image pickup optical system 2, 3 and a LCD display device 4. The compound eye camera 1 is supported by a main body 110 held by a user's hands, see Figs. 1, 15 and 19, col. 19, lines 22-54 and col. 21, lines 64-67. **Fraley** suggests that a personal surveillance system comprises a CCD video camera 103 and a microphone 104 are in a single package 102 sufficiently small to be worn as a badge, label pin, and sufficiently small to be conveniently carried by in one hand, see Figs. 1-3, col. 2, lines 32-36, col. 3, lines 11-46 and col. 4, lines 45-57. Therefore, it would have been obvious to one skill in the art at the time the invention was made to modified the compound eye camera of **Kurahashi et al** to be sufficiently small enough for carried by one hand or by the badge such as the video camera of **Fraley** since the compound eye camera can be separated from the display and with the new optical technology today can construct a miniature camera to provide convenience to a user as well as special applications such as hidden cameras, spy cameras and surveillance cameras.

Regarding claim 2, all the claimed subject matters are discussed between **Kurahashi et al** and **Fraley** in respect to claim 1 above, and including the transmission unit is held by the hold member (the transmission interface 41 is included with the compound eye camera 1, which is sufficiently small as discussed above).

Regarding claim 3, wherein the substituted compound eye camera also includes a plurality of optical elements 101a, 101b, see Fig. 13, col. 18, lines 15-44); and the

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optical axis inclined more outward with respect to the optical axis of the central optical element, see **Kurahashi et al**, Fig. 18, col. 21, lines 25-48).

Regarding claim 4, all the claimed subject matters are discussed between **Kurahashi et al** and **Fraley** in respect to claim 1 above, and including the forming an image-taking field angle of 120 degrees or more in a predetermined direction (the substituted compound eye camera provides a panoramic image with a wide image angle, see, Fig. 19, col. 21, lines 39-45, col. 24, lines 49-54).

Regarding claim 5, all the claimed subject matters are discussed between **Kurahashi et al** and **Fraley** in respect to claim 1 above, wherein the compound eye camera 1 can be hold by the user's clothing 202, see **Fraley**, Fig. 2, col. 3, lines 25-28.

Regarding claim 6 all the claimed subject matters are discussed between **Kurahashi et al** and **Fraley** in respect to claim 1 above, and including the hold member has a badge, button, buckle or card shape, see **Fraley**, Figs. 2 and 3, col. 2, lines 34-35.

Regarding claim 7, all the claimed subject matters are discussed between **Kurahashi et al** and **Fraley** in respect to claim 1 above, and including the reception unit (the horizontal and vertical drive operation units 112, 113, the initializing button 115 and the shutter release button 111, see Figs. 15 and 19, col. 20, lines 23-58) and the controller

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(the camera control unit 40, see Figs. 3, 9 and 10, col. 8, lines 5-47, col. 10, lines 62-67 and col. 14, lines 45-48).

Regarding claim 8, all the claimed subject matters are discussed between **Kurahashi et al** and **Fraley** in respect to claims 1 and 7 above, and including the controller for controlling an amount of image information transmitted by the transmission unit based on the control signal (the camera control unit 40, see col. 8, lines 5-47).

Regarding claim 9, all the claimed subject matters are discussed between **Kurahashi et al** and **Fraley** in respect to claim 1 above, and including the image display (the LCD display device 4, see Figs. 1 and 3, col. 5, lines 1-39 and col. 6, lines 40-64).

Regarding claim 10, all the claimed subject matters are discussed between **Kurahashi et al** and **Fraley** in respect to claims 7-9 above, and including the manipulation apparatus (the camera control unit 40 allows photographer user for input operations, such as setting of image recording or reproducing and setting of various modes, see Figs. 3, 9 and 10, col. 8, lines 5-67, col. 9 through col. 15 and col. 16, lines 1-9

Regarding claim 11, all the claimed subject matters are discussed between **Kurahashi et al** and **Fraley** in respect to claims 8 and 10 above.

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Strub et al discloses a low attention video recording provided by a small, lightweight, wearable recording unit by a person. [US 6,825,875] and [US 6,563,532]

Dohrmann discloses a security system comprising discrete detector units such as camera engaged together in data communication. [6,577,234]

Evans discloses a housing for a portable electronic device including a miniature video camera and a display. [US 6,181,381]

3. Any inquiry concerning this communication or earlier communications from examiner should be directed to primary examiner **Van Trieu** whose telephone number is (571) 272-2972. The examiner can normally be reached on Mon-Fri from 7:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. **Jeffery Hofsass** can be reached on (571) 272-2981.



Van Trieu
Primary Examiner
Date: 4/27/05